

SUBMITTAL

(Current revisions for the noted Standards apply)

Tyler Union Waterworks provides that our *Mechanical and Push-On joint gaskets and dimensions conform to the specifications in ANSI/AWWA C111/A21.11 (current revision). Markings include size, mold number, gasket manufacturer's mark, country where molded, and product identification letters. No markings are placed on sealing surfaces per the AWWA C111 standard.

*Note: Push-On and Mechanical Joint transition gasket design standards and markings are not addressed by ANSI/AWWA C111/A21.11 (current revision). Transition gaskets provided by Tyler Union follow the material testing standards and specifications established for ANSI/AWWA C111/A21.11 gaskets.

Gasket material is vulcanized styrene butadiene rubber (SBR). Purchaser may request special application elastomers (EPDM, Nitrile, Neoprene & FKM) which will be identified on all documentation and corresponding gaskets. Gaskets are free of foreign materials, porous areas, or other defects that make them unfit for the intended use.

Tyler Union gaskets are manufactured under quality control standards and procedures that are maintained by the gasket supplier. Appropriate documentation is maintained by the manufacturer and available for review upon request. Properties and test methods for SBR, EPDM, Nitrile, Neoprene and FKM gaskets are as provided.

Property	ASTM Test Method	Required Value
Hardness, Shore "A"	D2240-86	75 (+-5)
Minimum Tensile	D412-87	1500 psi (10MPa)
Minimum Elongation	D412-87	150 %
Minimum Aging	D572-88	60 %
Maximum Compression Set	D395-89, Method B	20 %
Resistance to surface Ozone cracking	D1149-86	No cracking

Tyler Union's approved suppliers maintain a quality assurance program that is reviewed and updated on an ongoing basis to ensure product quality. Tyler Union's gasket suppliers submit gaskets for testing and provide materials for testing to Underwriters Laboratories, Inc. Tyler Union's gasket providers are recognized under the component program (UL 194/ UL 157) of Underwriters Laboratories, Inc.. Tyler Union UL approved gaskets meet NSF-61, NSF-372 and Annex G.

Tyler Union provides that our Mechanical and Push-On joint gaskets for potable or wastewater projects will perform as designed when selected per the chart provided and installed per AWWA C600-10.

SBR (Styrene Butadiene rubber)(Buna-S) <u>Not Recommended for Hydrocarbon Service</u>	20°F to 180°F	Suitable for Water, Wastewater, most moderate chemicals, wet or dry organic acids, alcohols, ketones, and aldehydes
EPDM (Ethylene Propylene) <u>Not Recommended for Hydrocarbon Service</u>	-10°F to 250°F	Ideal for water, wastewater, ozone, & strong oxidizing chemicals May be used on steam and air within its temperature range
CR (Neoprene)	-10°F to 200°F	Recommended for moderate chemicals and acids, oil fats, greases, many solvents and air with hydrocarbons. Will not support combustion
NBR (Nitrile)(Buna-N)(Hycar)	-40°F to 250°F	Ideally suited for gasoline, petroleum products, hydrocarbons, water, mineral and vegetable oils
*FKM(Fluoroelastomer) *Check with Customer Service for availability	10°F to 425°F	Ideally suited for hydrocarbons, acids, vegetable oils & petroleum

Gasket Types Offered: (1)Mechanical Joint std.(2) Push-On Joint std.(3)Mechanical Joint DUO
(4)Mechanical & Push-on Joint Transition(5)Push-on Restraining
(6)Mechanical Joint Armor Tip Conductivity(7)Compact tapping Sleeve

Unless other wise requested by the purchaser upon order placement, all gaskets provided will be of our standard SBR material.

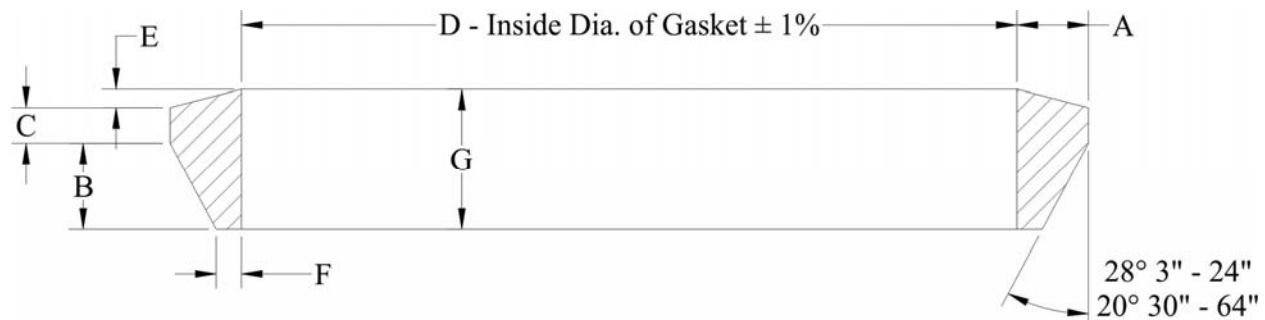
Mechanical Joint Gaskets

ANSI/AWWA C111/A21.11-12

*MJ Tru-Lock Gaskets 30-48 inch

Pipe Size	Pipe OD	A ±0.01"	B	C	D ±1%	E ±0.01%	F ±0.01"	G ±0.02"
**2	2.50	0.48	0.62	0.31	2.48	0.12	0.15	1.05
3	3.96	0.48	0.62	0.31	3.86	0.12	0.15	1.05
4	4.80	0.62	0.75	0.31	4.68	0.16	0.22	1.22
6	6.90	0.62	0.75	0.31	6.73	0.16	0.22	1.22
8	9.05	0.62	0.75	0.31	8.85	0.16	0.22	1.22
10	11.10	0.62	0.75	0.31	10.87	0.16	0.22	1.22
12	13.20	0.62	0.75	0.31	12.95	0.16	0.22	1.22
14	15.30	0.62	0.75	0.31	14.99	0.16	0.22	1.22
16	17.40	0.62	0.75	0.31	17.07	0.16	0.22	1.22
18	19.50	0.62	0.75	0.31	19.13	0.16	0.22	1.22
20	21.60	0.62	0.75	0.31	21.20	0.16	0.22	1.22
24	25.80	0.62	0.75	0.31	25.34	0.16	0.22	1.22
30	32.00	0.73	1.00/* .50	.38/* .50	31.47	0.16	.37/* .55	1.54/*1.16
36	38.30	0.73	1.00/* .50	.38/* .50	37.67	0.16	.37/* .55	1.54/*1.16
42	44.50	0.73	1.00/* .50	.38/* .50	43.78	0.16	.37/* .55	1.54/*1.16
48	50.80	0.73	1.00/* .50	.38/* .50	49.98	0.16	.37/* .55	1.54/*1.16

** Not included in AWWA C111. Manufacture's Standard does not meet AWWA C111



**** Mechanical Joint Transition Gasket Dimensions in Inches**

Pipe Size	A ± 0.01"	B	C	D ±1%	E	F ± 0.01"	G ± 0.02"
2	0.57	0.62	0.31	2.28	0.16	0.24	1.08
3	0.70	0.62	0.31	3.45	0.16	0.37	1.11
4	0.77	0.75	0.31	4.43	0.16	0.37	1.26
6	0.76	0.75	0.31	6.53	0.16	0.36	1.25
8	0.82	0.75	0.31	8.50	0.16	0.42	1.27
10	0.79	0.75	0.31	10.59	0.16	0.39	1.26
12	0.84	0.75	0.31	12.56	0.16	0.44	1.28

** Not included in AWWA C111. Manufacture's Standard does not meet AWWA C111